

74779-13

10/17/2013

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460



OFFICE OF  
CHEMICAL SAFETY AND  
POLLUTION PREVENTION

Rainbow Treecare Scientific Advancements  
11571 K-Tel Drive  
Minnetonka, MN 55343

OCT 17 2013

Subject: Amended label adding pollinator protection language  
Product Name: Xytect 2F  
EPA Reg. No. 74779-13  
EPA Decision No. 482539  
Submission dated August 16, 2013

Dear Mr. Anderson:

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act is acceptable. A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one (1) copy of the final printed labeling before you release the product for shipment with the new labeling. See 40 CFR 156.10(a)(6).

Under 40 CFR 152.130(d), EPA may establish dates by which all product distributed or sold by the registrant must bear revised labeling. The following paragraphs set forth the schedule for ensuring that that your product bears revised labeling within a reasonable time period.

- Any product released for shipment after 1/31/14 must bear the new label.

If these conditions are not complied with, EPA will take appropriate action against this registration. If you have any questions please contact Dr. Jennifer Urbanski at 703-347-0156 or [urbanski.jennifer@epa.gov](mailto:urbanski.jennifer@epa.gov).

Regards,

A handwritten signature in black ink that reads "Venus Eagle".

Venus Eagle, Product Manager (01)  
Insecticide-Rodenticide Branch  
Registration Division (7505P)

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**SUB LABEL A: Has Sod Farm uses and Ag Use & Non-Ag Use Requirements boxes**

**XYTECT 2F**

Insecticide for foliar and systemic insect control in turfgrass (including sod farms),  
landscape ornamentals, listed fruit and nut trees and interior plantscapes.

**ACTIVE INGREDIENT:**

Imidacloprid, 1-[(6-Chloro-3-pyridinyl)methyl]-N-nitro-2-imidazolidinimine .....	21.4%
OTHER INGREDIENTS: .....	78.6%
TOTAL: .....	100.0%

Contains 2 pounds of imidacloprid per gallon.

SHAKE WELL BEFORE USING

**KEEP OUT OF REACH OF CHILDREN.**

**CAUTION**

PRECAUCION AL USUARIO: Si usted no puede leer o entender ingles, no use este producto hasta que la etiqueta le haya sido explicada ampliamente.

(TO THE USER: If you cannot read or understand English, do not use this product until the label has been fully explained to you.)

FIRST AID	
IF SWALLOWED	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
IF ON SKIN OR CLOTHING	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15 to 20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
IF IN EYES	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
In case of emergency call CHEMTREC toll free at 1-800-424-9300. Have a product container or label with you when calling a poison control center or, doctor, or going for treatment.	
NOTE TO PHYSICIAN: No specific antidote is available. Treat the patient symptomatically.	

EPA Reg. No. 74779-13  
AD082611

EPA Est. No. xxxxxx-xx-xxx

NET CONTENTS: 8 Fluid Ounces/32 Fluid Ounces/1 gallon/2.5 gallon

Manufactured For:  
Rainbow Treecare Scientific Advancements  
11571 K-Tel Drive  
Minnetonka, MN 55343

**ACCEPTED**  
**OCT 17 2013**  
**Under the Federal Insecticide, Fungicide,**  
**and Rodenticide Act, as amended, for the**  
**pesticide registered under:**

EPA. Reg. No: 74779-13

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For non-emergency questions for this product call Rainbow Treecare Scientific Advancements toll free at  
1-877-272-6747

### PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**CAUTION:** Harmful if swallowed or absorbed through skin. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling. Keep children or pets off treated area until spray is dry.

Applicators and Other Handlers Must Wear:

1. Long-sleeved shirt and long pants
2. Chemical resistant gloves made of any waterproof material such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinyl chloride (PVC) or viton. If you want more options, follow the instructions for category A on an EPA chemical-resistant category chart.
3. Shoes plus socks

Follow manufacturer's instructions for cleaning/ maintaining personal protective equipment, PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

#### ENGINEERING CONTROLS STATEMENTS:

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

#### USER SAFETY RECOMMENDATIONS

User should:

1. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
2. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
3. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

#### ENVIRONMENTAL HAZARDS

This product is highly toxic to aquatic invertebrates. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters.

This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are foraging the treatment area.

This chemical demonstrates the properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

**PROTECTION OF POLLINATORS**

**APPLICATION RESTRICTIONS EXIST FOR THIS PRODUCT BECAUSE OF RISK TO BEES AND OTHER INSECT POLLINATORS. FOLLOW APPLICATION RESTRICTIONS FOUND IN THE DIRECTIONS FOR USE TO PROTECT POLLINATORS.**



Look for the bee hazard icon in the Directions for Use for each application site for specific use restrictions and instructions to protect bees and other insect pollinators.

**This product can kill bees and other insect pollinators.**

Bees and other insect pollinators will forage on plants when they flower, shed pollen, or produce nectar.

Bees and other insect pollinators can be exposed to this pesticide from:

- Direct contact during foliar applications, or contact with residues on plant surfaces after foliar applications
- Ingestion of residues in nectar and pollen when the pesticide is applied as a seed treatment, soil, tree injection, as well as foliar applications.

When Using This Product Take Steps To:

- Minimize exposure of this product to bees and other insect pollinators when they are foraging on pollinator attractive plants around the application site.
- Minimize drift of this product on to beehives or to off-site pollinator attractive habitat. Drift of this product onto beehives or off-site to pollinator attractive habitat can result in bee kills.

Information on protecting bees and other insect pollinators may be found at the Pesticide Environmental Stewardship website at: <http://pesticidestewardship.org/PollinatorProtection/Pages/default.aspx>.

Pesticide incidents (for example, bee kills) should immediately be reported to the state/tribal lead agency. For contact information for your state, go to: [www.aapco.org/officials.html](http://www.aapco.org/officials.html). Pesticide incidents should also be reported to the National Pesticide Information Center at: [www.npic.orst.edu](http://www.npic.orst.edu) or directly to EPA at: [beekill@epa.gov](mailto:beekill@epa.gov).

#### STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

**PESTICIDE STORAGE:** Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area.

Handle and open container in a manner as to prevent spillage. If the container is leaking or material spilled for any reason or cause, care-fully sweep material into a pile. Refer to Precautionary Statements on label for hazards associated with the handling of this material. Do not walk through spilled material. Dispose of pesticide as directed below. In spill or leak incidents, keep unauthorized people away. You may contact Chemtrec at 800-424-9300 for decontamination procedures or any other assistance that may be necessary.

**PESTICIDE DISPOSAL:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

**CONTAINER DISPOSAL:** Non-refillable containers (1, 2.5, 30 & 55 gallon): Do not reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. Offer for recycling, if available or puncture and dispose of in a sanitary landfill, or incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

(non-refillable  $\leq 5$  gallons): Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container  $\frac{1}{4}$  full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

(non-refillable  $>5$  gallons): Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container  $\frac{1}{4}$  full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use for disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

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## DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.



**See individual sites for specific pollinator protection application restrictions. If none exist under the specific site, for outdoor foliar applications, follow these application directions:**

**Do not apply Xytect 2F while bees are foraging. Do not apply Xytect 2F to plants that are flowering. Only apply after all flower petals have fallen off.**

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12 hours.

Exception: If the product is applied by drenching, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:

1. Coveralls
2. Chemical resistant gloves made of any waterproof material such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinyl chloride (PVC) or viton. If you want more options, follow the instructions for category A on an EPA chemical-resistant category chart.
3. Shoes plus socks

### NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Keep children and pets off treated area until dry.

**RESTRICTION:** Do not formulate this product into other end-use products.

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APPLICATION TO TURFGRASS

XYTECT 2F will control the following soil inhabiting pests and larvae found in turfgrass

PEST	SCIENTIFIC NAME
Northern & Southern masked chafers	<i>Cyclocephala borealis</i> , <i>C. immaculata</i> , and/or <i>C. lurida</i>
Asiatic garden beetle	<i>Maladera castanea</i>
European chafer	<i>Rhizotroqus majalis</i>
Green June beetle	<i>Cotinis nitida</i>
May or June beetle	<i>Phyllophaga spp.</i>
Japanese beetle	<i>Popillia japonica</i>
Oriental beetle	<i>Anomala orientalis</i>
Billbugs	<i>Spherophorus spp.</i>
Annual bluegrass weevil	<i>Hyperodes spp.</i>
Black turfgrass ataenius	<i>Ataenius spretulus</i> and <i>Aphodius spp</i>
European Crane Fly	<i>Tipula paludosa</i>
Mole crickets	<i>scapteriscus spp.</i>

XYTECT 2F will suppress cutworms and chinch bugs.

XYTECT 2F can be applied on turfgrass in the following sites:

- |                                    |                 |
|------------------------------------|-----------------|
| Home lawns                         | Cemeteries      |
| Business and office complexes      | Parks           |
| Shopping complexes                 | Playgrounds     |
| Multi-family residential complexes | Athletic fields |
| Golf courses                       | Sod farms*      |
| Airports                           |                 |

XYTECT 2F has adequate residual activity that applications can be made preceding the egg laying activity of the target pests.

Best control is achieved when applications are made prior to egg hatch of the pests and when rainfall or irrigation after application will penetrate vertically in the soil column carrying the active ingredient into the zone where insects are normally located. In order to move the active ingredient through the thatch, irrigate if rainfall does not occur within 24 hours after application.

Apply 1.25 to 1.6 pints per acre (equivalent to 0.46 to 0.6 fl oz per 1000 sq ft). Make application prior to egg hatch of grubs, billbugs, annual bluegrass weevil, and European Crane Fly to maximize control.

For chinch bugs (suppression) and mole crickets apply 1.6 pints per acre (equivalent to 0.6 fl oz per 1000 sq ft). For suppression of chinchbugs, make application before the hatching of the first instar nymphs.

For control of mole crickets make application before or during the peak egg hatch period. If adults or large nymphs are actively tunneling, combine applications of XYTECT 2F with a remedial insecticide. Follow label instructions for other insecticides when tank-mixing.

Consult your local turf, state Agricultural Experiment Station, or State Extension Service Specialists for more specific information regarding timing of application.

Application Equipment for Use on Turfgrass

Dilute XYTECT 2F with enough water to provide adequate volume to promote thorough distribution into the pest zone. Use only accurately calibrated equipment for application to turfgrass. Apply a uniform, coarse droplet spray, using a low pressure setting to eliminate off target drift. Perform calibration on a

regular basis to ensure that equipment is distributing product properly.

#### RESTRICTIONS FOR TURFGRASS USE:

- Do not exceed a total of 1.6 pints application (0.4 lb of active ingredient) per acre per year.
- Do not mow turf or lawn area, until after adequate irrigation or rainfall has occurred.
- Do not apply when infested turfgrass areas are waterlogged or soil beneath turf is saturated with water. These conditions prevent thorough and consistent distribution.
- Do not apply this product or allow it to drift to plants in bloom if bees are foraging the treatment area.
- \* Do not use in Arizona unless otherwise directed by state specific 24(c) labeling

#### APPLICATION TO ORNAMENTALS

XYTECT 2F can be applied to ornamental plants in commercial and residential landscapes and interior plantscapes. XYTECT 2F is a systemic insecticide that is transported within the plant system from the roots to upper foliage. XYTECT 2F must be applied into a growing area of the plant that allows absorption of the active ingredient. Adding soluble nitrogen type fertilizers to the spray solution when appropriate can promote the uptake of the active ingredient.

Application can be made by foliar application or soil applications; including soil injection, drenches, and broadcast sprays. Foliar applications offer locally systemic activity against insect pests.

The systemic translocation of active ingredient will be slower when applied to woody plants with soil applications. This delay can take 60 days or longer depending on species and size of plant. To offset this, make applications before anticipated pest infestation.

RESTRICTION: For outdoor ornamentals, applications cannot exceed a total of 1.6 pints (0.4 lb of active ingredient) per acre per year.

#### ANT MANAGEMENT PROGRAMS

Use XYTECT 2F to control aphids, scale insects, mealybugs and other sucking pests on ornamentals with ant populations because it removes honeydew as a food source. To enhance control of ants, supplement with residual sprays, bait placements or other ant control tactics.

#### APPLICATION EQUIPMENT FOR FOLIAR APPLICATIONS

XYTECT 2F mixes readily with water and may be used in many types of application equipment. Add a commercial spreader/sticker to promote coverage on hard to wet foliage such as holly, pine, or ivy.

XYTECT 2F is compatible with many commonly used fungicides, miticides, liquid fertilizers, and other insecticides. If applicator has no prior experience with a particular tank mix; check physical compatibility by making a small clear jar test using correct proportions of products to be tank mixed.

#### RESTRICTIONS

- Follow application restrictions for non-agricultural uses to protect bees and other pollinators when making foliar applications.
- Keep children and pets off treated area until dry.
- For outdoor ornamentals, broadcast applications cannot exceed 1.6 pt (0.4 lb of active ingredient) per acre per year.
- Not for use in commercial greenhouses, nurseries, or on grasses grown for seed, or on commercial fruit and nut trees.
- Do not graze treated areas or use clippings from treated areas for feed or forage.
- Do not apply through any irrigation system

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- Do not allow puddling of irrigation water following application.
- Do not apply XYTECT 2F to areas which are water logged or saturated, which will not allow penetration into the root zone of the plant.
- Treated areas may be replanted with any crop specified on an imidacloprid label, or with any crop for which a tolerance exists for the active ingredient.
- For crops not listed on an imidacloprid label, or for crops for which no tolerances for the active ingredient have been established, a 12-month plant-back interval is required.



**FOLIAR APPLICATION TO ORNAMENTAL AND NON-BEARING FRUIT & NUT TREES, SHRUBS, EVERGREENS, FLOWERS, FOLIAGE PLANTS, GROWDCOVERS AND INTERIOR PLANTSCAPES**  
(Only for Industrial, Commercial Buildings, Residential and Landscaped Planting Areas)

**TO CONTROL:**

- |  |   |
|--|---|
| Adelgids   | Mealybugs   |
| Aphids   | Planthoppers  |
| Honeylocust Plant Bug  | Psyllids  |
| Diptera (Including Rhododendron gall midge,<br>Honeylocust pod gall midge) | Sawfly larvae   |
| Froghopper   | Scales (Including Lecanium, Azalea bark,<br>Calico, Cottony Camellia, Cottony maple,<br>Cottony taxus). |
| Galls (Including Hickory stem gall)  | Spittlebugs   |
| Japanese beetles   | Thrips (suppression) (Including Flower, Pear<br>and<br>Pine thrips)                                     |
| Lace bugs  | Treehoppers   |
| Leaf beetles<br>(Including elm and viburnum leaf beetles)                  | Weevils (Including white Pine and Black vine)   |
| Leafhoppers<br>(Including glassy-winged sharpshooter)                      | Whiteflies  |
| Leafminers (Including Boxwood leafminer)                                   |   |

Apply 1.5 fluid ounces (45mL) per 100 gal of water. Make foliar applications before high pest populations become established. Reapply on an as needed basis.

To control White grub larvae, (such as Japanese beetle larvae, Chafers, Phyllophaga spp. Asiatic garden beetle, Oriental beetle) apply 0.46 to 0.6 fluid ounces (14 to 17 mL) per 1000 sq ft.

Make broadcast applications by mixing specified rate in enough water to uniformly cover the treated area. Do not use less than 2 gallons of water per 1000 sq ft. In order to move the active ingredient through the thatch, irrigate if rainfall does not occur within 24 hours after application.

Refer to use directions specific for FLOWERS and GROUND COVERS concerning additional use directions.

Restriction: For outdoor ornamentals, broadcast applications cannot exceed 1.6 pt (0.4 lb of active ingredient) per acre per year. Follow application restrictions for non-agricultural uses to protect bees and other pollinators.

**SOIL APPLICATION TO ORNAMENTAL AND NON-BEARING FRUIT & NUT TREES, SHRUBS, FLOWERS AND GROWDCOVERS**  
(Only For Industrial, Commercial Buildings, Residential, Landscaped Planting Areas)  
(Including State, National, and Private Wooded and Forested Areas)

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TO CONTROL:

Adelgids  
Aphids  
Armored scales (suppression)  
Black vine weevil larvae  
Eucalyptus longhorned borer  
Flatheaded borers  
(including bronze, alder and emerald ash borers)  
Japanese beetles  
Lace bugs  
Leaf beetles  
(including elm and viburnum leaf beetles)  
Leafhoppers  
(including glassywinged sharpshooter)

Leafminers  
Mealybugs  
Pine tip moth larvae  
Plant bugs  
Psyllids  
Roundheaded borers  
(including Asian longhorned beetles)  
Royal Palm Bugs  
Sawfly larvae  
Soft scales  
Thrips (suppression)  
White grub larvae  
Whiteflies

For TREES -

Use the following rates as a function of tree diameter at breast height (DBH):

Apply 0.1 - 0.4 fl oz per inch of trunk diameter (DBH). You may use the higher rate (0.3 - 0.4 fl oz) only for trees greater than 15 DBH to control the following pests:

Asian longhorned beetle  
Emerald Ash Borer  
Eucalyptus longhorned borer  
Bronze birch borer  
Alder borer

Restriction: For outdoor ornamentals, broadcast applications cannot exceed 1.6 pt (0.4 lb of active ingredient) per acre per year.

Diameter at Breast Height (D.B.H.) = is measured at 4.5 feet from the ground.

APPLICATION TECHNIQUE:

SOIL INJECTION:

Mix required dosage in sufficient water to inject an equal amount of solution in each hole. For concentrate injectors mix required dose with up to 1 gallon of water per DBH inch. Maintain a low pressure and use sufficient solution for distribution of the liquid into treatment zone. Dilution rate may vary depending on equipment used, tree size and application rate. Refer to the instructions for injector equipment being used for guidance.

- GRID SYSTEM: Make applications in a grid pattern on 2.5 foot centers within the drip line of the tree.
- CIRCLE SYSTEM: Make applications in holes evenly spaced approximately 2 - 3 feet apart in a circle within the drip line of the tree. Larger trees may require additional application circles.
- BASAL SYSTEM: Make applications into holes evenly spaced around the base of the tree trunk no more than 6 to 12 Inches out from the base.

SOIL DRENCH:

Uniformly apply the dosage in no less than 10 gallons of water per 1000 square feet as a drench around the base of the tree, directed to the root zone. Any plastic or other barrier that may prevent drench solution from reaching the root zone must be removed.

**FOR ALL APPLICATION TECHNIQUES:**

- Inject an equal amount of water and solution in each hole.
- Use low pressure and sufficient solution for thorough distribution into the treatment zone.
- Maintain soil moisture for 7 to 10 days.
- Application to trees already heavily infested with borers listed may not prevent the eventual loss of the trees.

**RESTRICTIONS FOR TREES:**

- Do not use less than 4 holes per tree.
- No Soil Injection Applications Allowed In Nassau or Suffolk Counties of New York.
- For outdoor ornamentals, broadcast applications cannot exceed 1.6 pt (0.4 lb of active ingredient) per acre per year.

**For SHRUBS –**

Apply 0.1 to 0.2 fl oz (3 to 6 mL) per foot of shrub height.

**APPLICATION TECHNIQUES:**

**SOIL INJECTION:**

Apply to individual plants using dosage indicated.

**SOIL DRENCH:**

Uniformly apply the dosage in no less than 10 gallons of water per 1000 square feet as a drench around the base of the shrub, directed to the root zone. Remove plastic or any other barrier that will stop solution from reaching the root zone.

- Mix required dosage in sufficient water to inject an equal amount of solution in each hole.
- Maintain a low pressure and use sufficient solution for distribution of the liquid into the treatment zone.
- Maintain soil moisture for 7 to 10 days.

**RESTRICTIONS FOR SHRUBS:**

- Do not use less than 4 holes per shrub.
- No Soil Injection Applications Allowed In Nassau or Suffolk Counties of New York.
- Do not exceed 1.6 pt (0.4 lb of active ingredient) per acre per year.



**For FLOWERS and GROWDCOVERS –**

Apply 0.46 to 0.6 fluid ounces (14 to 17 mL) per 1000 sq ft.

Apply as a broadcast treatment and incorporate into the soil before planting or apply after plants are established. If application is made to established plants, irrigate after application.

**RESTRICTIONS;**

- Follow application restrictions for non-agricultural uses to protect bees and other pollinators.
- Do not exceed 1.6 pts (0.4 lbs ai) per acre per year.

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POME FRUITS  
(For Residential Areas Only)

Includes: Apple, Crabapple, Loquat, Mayhaw, Pear, Pear (oriental), Quince

TO CONTROL:

Aphids (except Woolly apple aphid)  
Leafhoppers (including glassy-winged  
sharpshooter)

Leafminer  
Mealybugs  
San Jose Scale

Apply 1.5 fluid ounces (45 mL) per 100 gal

OR

6.0 fluid ounces per acre as foliar spray as specified after petal-fall is complete.

- For control of rosy apple aphid, apply prior to leafrolling caused by the pest.
- For first generation leafminer control, make first application as soon as petal fall is complete. Greatest leafminer control will result from the earliest possible application. For second and succeeding generations of leafminer, optimal control is obtained from applications made early in the adult flight against egg and early instar larvae. A second application may be required 10 days later if severe pressure continues or if generations are overlapping. A single application may result in suppression only. XYTECT 2F will not control late stage larvae.
- For San Jose Scale, time applications to the crawler stage. Treat each generation.
- For late season (preharvest) control of leafhopper species, apply XYTECT 2F while most leafhoppers are in the nymphal stage.
- For optimal control of mealybug, insure good spray coverage of the trunk and scaffolding limbs or other resting sites of the mealybug.

RESTRICTIONS FOR RESIDENTIAL POME FRUITS:

- Do not apply more than 6.0 fluid ounces per acre in a single application. Do not make more than 4 applications per acre per year.
- Allow 10 or more days between applications.
- Allow at least 7 days between last application and harvest.
- Not for use in California for control on pears.
- Follow application restrictions for non-agricultural uses to protect bees and other pollinators.

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**PECAN**  
(For Residential Areas Only)

**TO CONTROL:**

Yellow pecan aphid  
Pecan spittlebug  
Black margined aphid

Pecan stem phylloxera  
Pecan leaf phylloxera

Apply 1.5 fl oz (45 ml) per 100 gal

OR

6.0 fl oz/A<sup>1</sup> as a foliar application as pest pressure begins to increase.

Make a second application 10 to 14 days after first if field scouting reveals continued pest pressure. Use of an organosilicone based spray adjuvant at specified rate can insure thorough coverage of foliage.

**RESTRICTIONS FOR RESIDENTIAL PECAN TREES:**

- Do not apply more than a total of 18.0 fluid ounces of XYTECT 2F per acre per year.
- Do not make more than 3 applications per year.
- Allow 10 or more days between applications.
- Do not use on pecans in California unless directed by state specific 24 (c) labeling
- Follow application restrictions for non-agricultural uses to protect bees and other pollinators.

<sup>1</sup> The amount of Xytext 2F required per acre may vary and depends on tree size or volume of foliage. The rates given are based on a standard of 400 gallons of dilute spray solutions per acre for large trees with full foliage. DO NOT apply more than 18 fluid ounces of Xytext 2F per acre per year.



**GRAPES**  
(For Use Only For Industrial, Commercial Buildings and Residential Planting Areas)

**TO CONTROL:**

Leafhoppers (including glassy-winged sharpshooter)  
Mealybugs

Apply 1.5 fl oz (45 mL) per 100 gal

OR

3.0 fl oz/A (90 mL/A) as a foliar spray using 200 gallons of water per acre.

**RESTRICTIONS FOR RESIDENTIAL GRAPES:**

- Do not apply more than a total of 6.0 ounces of XYTECT 2F per acre per year.
- Allow at least 14 days between applications.
- Applications may be applied up to and including day of harvest.
- Follow application restrictions for non-agricultural uses to protect bees and other pollinators.

**CONDITIONS OF SALE AND WARRANTY**

The DIRECTIONS FOR USE of this product reflect the opinion of experts based on field use and tests. The

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directions are believed to be reliable and must be followed carefully. However, it is impossible to eliminate all risks inherently associated with use of this product. Crop injury, ineffectiveness, or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of RAINBOW TREECARE SCIENTIFIC ADVANCEMENTS, its Supplemental Distributors, or the Seller. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, All such risks shall be assumed by the Buyer.

RAINBOW TREECARE SCIENTIFIC ADVANCEMENTS, its Supplemental Distributors and the Seller warrant that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the Directions for Use subject to the inherent risks referred to above. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, NEITHER RAINBOW TREECARE SCIENTIFIC ADVANCEMENTS NOR ITS SUPPLEMENTAL DISTRIBUTORS MAKE ANY OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE OR OF MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THIS WARRANTY DOES NOT EXTEND TO, AND THE BUYER SHALL BE SOLELY RESPONSIBLE FOR, ANY AND ALL LOSS OR DAMAGE WHICH RESULTS FROM THE USE OF THIS PRODUCT IN ANY MANNER WHICH IS INCONSISTENT WITH THE LABEL DIRECTIONS.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BUYER'S EXCLUSIVE REMEDY AND THE EXCLUSIVE LIABILITY OF RAINBOW TREECARE SCIENTIFIC ADVANCEMENTS, ITS SUPPLEMENTAL DISTRIBUTORS AND THE SELLER FOR ANY AND ALL CLAIMS, LOSSES, DAMAGES, OR INJURIES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER OR NOT BASED IN CONTRACT, NEGLIGENCE, STRICT LIABILITY IN TORT OR OTHERWISE, SHALL BE LIMITED, AT THE MANUFACTURER'S OPTION, TO REPLACEMENT OF OR THE REPAYMENT OF THE PURCHASE PRICE FOR THE QUANTITY OF PRODUCT WITH RESPECT TO WHICH DAMAGES ARE CLAIMED. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, When Buyer suffers losses or damages resulting from the use or handling of this product (including claims based on contract, negligence, strict liability, or other legal theories), Buyer must promptly notify Seller in writing of any claims to be eligible to receive either remedy stated above. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, IN NO CASE SHALL RAINBOW TREECARE SCIENTIFIC ADVANCEMENTS, ITS SUPPLEMENTAL DISTRIBUTORS, OR THE SELLER BE LIABLE FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT. RAINBOW TREECARE SCIENTIFIC ADVANCEMENTS, its Supplemental Distributors, and the Seller offer this product, and the Buyer accepts it, subject to the foregoing Conditions of Sale and Warranty, which may be varied only by agreement in writing signed by a duly authorized representative of RAINBOW TREECARE SCIENTIFIC ADVANCEMENTS.

No employee or agent of RAINBOW TREECARE SCIENTIFIC ADVANCEMENTS, its Supplemental Distributor, or the Seller is authorized to vary or exceed the terms of this Warranty in any other manner.

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**SUB LABEL B: Deletes Sod Farm uses and Ag Use & Non-Ag Use Requirements boxes**

**XYTECT 2F**

Insecticide for foliar and systemic insect control in turfgrass,  
landscape ornamentals, listed residential fruit and nut trees and interior plantscapes.

**ACTIVE INGREDIENT:**

Imidacloprid, 1-[(6-Chloro-3-pyridinyl)methyl]-N-nitro-2-imidazolidinimine ..... 21.4%

**OTHER INGREDIENTS:** ..... 78.6%

**TOTAL:** ..... 100.0%

Contains 2 pounds of imidacloprid per gallon.

*[bulleted items of optional marketing text]*

- **For Trees, Shrubs, Roses & Flowers**
- **Kills Listed Insects & Protects Plants**
- **Controls More Than 40 Tree & Garden Pests**
- **Just Minutes to Apply**
- **Same Formulation as: Xytect Concentrated Formula**
- **Kills:**
  - **Emerald Ash Borer**
  - **Japanese Beetles**
  - **Bronze Birch Borer**
  - **Many others as listed**

SHAKE WELL BEFORE USING

**KEEP OUT OF REACH OF CHILDREN.**

**CAUTION**

PRECAUCION AL USUARIO: Si usted no puede leer o entender ingles, no use este producto hasta que la etiqueta le haya sido explicada ampliamente.

(TO THE USER: If you cannot read or understand English, do not use this product until the label has been fully explained to you.)

FIRST AID	
IF SWALLOWED	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
IF ON SKIN OR CLOTHING	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15 to 20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
IF IN EYES	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
In case of emergency call CHEMTREC toll free at 1-800-424-9300. Have a product container or label with you when calling a poison control center or, doctor, or going for treatment.	
NOTE TO PHYSICIAN: No specific antidote is available. Treat the patient symptomatically.	

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AD071811

NET CONTENTS: 8 Fluid Ounces/32 Fluid Ounces/1 gallon/2.5 gallon

Manufactured For:  
Rainbow Treecare Scientific Advancements  
11571 K-Tel Drive  
Minnetonka, MN 55343

For non-emergency questions for this product call Rainbow Treecare Scientific Advancements toll free at  
1-877-272-6747

### PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**CAUTION:** Harmful if swallowed or absorbed through skin. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling. Keep children or pets off treated area until spray is dry.

Applicators and Other Handlers Must Wear:

1. Long-sleeved shirt and long pants
2. Chemical resistant gloves made of any waterproof material such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinyl chloride (PVC) or viton. If you want more options, follow the instructions for category A on an EPA chemical-resistant category chart.
3. Shoes plus socks

Follow manufacturer's instructions for cleaning/ maintaining personal protective equipment, PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

#### USER SAFETY RECOMMENDATIONS

User should:

4. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
5. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
6. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

#### ENVIRONMENTAL HAZARDS

This product is highly toxic to aquatic invertebrates. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters.

This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are foraging the treatment area.

This chemical demonstrates the properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

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## PROTECTION OF POLLINATORS



**APPLICATION RESTRICTIONS** EXIST FOR THIS PRODUCT BECAUSE OF RISK TO BEES AND OTHER INSECT POLLINATORS. FOLLOW APPLICATION RESTRICTIONS FOUND IN THE DIRECTIONS FOR USE TO PROTECT POLLINATORS.



Look for the bee hazard icon in the Directions for Use for each application site for specific use restrictions and instructions to protect bees and other insect pollinators.

**This product can kill bees and other insect pollinators.**

Bees and other insect pollinators will forage on plants when they flower, shed pollen, or produce nectar.

Bees and other insect pollinators can be exposed to this pesticide from:

- Direct contact during foliar applications, or contact with residues on plant surfaces after foliar applications
- Ingestion of residues in nectar and pollen when the pesticide is applied as a seed treatment, soil, tree injection, as well as foliar applications.

When Using This Product Take Steps To:

- Minimize exposure of this product to bees and other insect pollinators when they are foraging on pollinator attractive plants around the application site.
- Minimize drift of this product on to beehives or to off-site pollinator attractive habitat. Drift of this product onto beehives or off-site to pollinator attractive habitat can result in bee kills.

Information on protecting bees and other insect pollinators may be found at the Pesticide Environmental Stewardship website at: <http://pesticidestewardship.org/PollinatorProtection/Pages/default.aspx>.

Pesticide incidents (for example, bee kills) should immediately be reported to the state/tribal lead agency. For contact information for your state, go to: [www.aapco.org/officials.html](http://www.aapco.org/officials.html). Pesticide incidents should also be reported to the National Pesticide Information Center at: [www.npic.orst.edu](http://www.npic.orst.edu) or directly to EPA at: [beekill@epa.gov](mailto:beekill@epa.gov)

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### STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

**PESTICIDE STORAGE:** Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area.

Handle and open container in a manner as to prevent spillage. If the container is leaking or material spilled for any reason or cause, care-fully sweep material into a pile. Refer to Precautionary Statements on label for hazards associated with the handling of this material. Do not walk through spilled material. Dispose of pesticide as directed below. In spill or leak incidents, keep unauthorized people away. You may contact Chemtrec at 800-424-9300 for decontamination procedures or any other assistance that may be necessary.

**PESTICIDE DISPOSAL:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

**CONTAINER DISPOSAL:** Non-refillable containers (1, 2.5, 30 & 55 gallon): Do not reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. Offer for recycling, if available or puncture and dispose of in a sanitary landfill, or incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

(non-refillable  $\leq$ 5 gallons): Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container  $\frac{1}{4}$  full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

(non-refillable  $>$ 5 gallons): Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container  $\frac{1}{4}$  full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use for disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

### DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

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**See individual sites for specific pollinator protection application restrictions. If none exist under the specific site, for outdoor foliar applications, follow these application directions:**

**Do not apply Xytect 2F while bees are foraging. Do not apply Xytect 2F to plants that are flowering. Only apply after all flower petals have fallen off.**

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

RESTRICTION: Do not formulate this product into other end-use products.

### APPLICATION TO TURFGRASS

XYTECT 2F will control the following soil inhabiting pests and larvae found in turfgrass

[Alternate exclusionary statement for product marketed without sod farm use]

**Restriction: Not for use on plants being grown for sale or other commercial use or for commercial seed, sod production or for research purposes.**

PEST	SCIENTIFIC NAME
Northern & Southern masked chafers	<i>Cyclocephala borealis, C. immaculata, and/or C. lurida</i>
Asiatic garden beetle	<i>Maladera castanea</i>
European chafer	<i>Rhizotroqus majalis</i>
Green June beetle	<i>Cotinis nitida</i>
May or June beetle	<i>Phyllophaga spp.</i>
Japanese beetle	<i>Popillia japonica</i>
Oriental beetle	<i>Anomala orientalis</i>
Billbugs	<i>Spherophorus spp.</i>
Annual bluegrass weevil	<i>Hyperodes spp.</i>
Black turfgrass ataenius	<i>Ataenius spretulus and Aphodius spp</i>
European Crane Fly	<i>Tipula paludosa</i>
Mole crickets	<i>scapteriscus spp.</i>

XYTECT 2F will suppress cutworms and chinch bugs.

XYTECT 2F can be applied on turfgrass in the following sites:

- |                                    |                 |
|------------------------------------|-----------------|
| Home lawns                         | Airports        |
| Business and office complexes      | Cemeteries      |
| Shopping complexes                 | Parks           |
| Multi-family residential complexes | Playgrounds     |
| Golf courses                       | Athletic fields |

XYTECT 2F has adequate residual activity that applications can be made preceding the egg laying activity of the target pests.

Best control is achieved when applications are made prior to egg hatch of the pests and when rainfall or irrigation after application will penetrate vertically in the soil column carrying the active ingredient into the zone where insects are normally located. In order to move the active ingredient through the thatch,

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irrigate if rainfall does not occur within 24 hours after application.

Apply 1.25 to 1.6 pints per acre (equivalent to 0.46 to 0.6 fl oz per 1000 sq ft). Make application prior to egg hatch of grubs, billbugs, annual bluegrass weevil, and European Crane Fly to maximize control.

For chinch bugs (suppression) and mole crickets apply 1.6 pints per acre (equivalent to 0.6 fl oz per 1000 sq ft). For suppression of chinchbugs, make application before the hatching of the first instar nymphs.

For control of mole crickets make application before or during the peak egg hatch period. If adults or large nymphs are actively tunneling, combine applications of XYTECT 2F with a remedial insecticide. Follow label instructions for other insecticides when tank-mixing.

Consult your local turf, state Agricultural Experiment Station, or State Extension Service Specialists for more specific information regarding timing of application.

#### Application Equipment for Use on Turfgrass

Dilute XYTECT 2F with enough water to provide adequate volume to promote thorough distribution into the pest zone. Use only accurately calibrated equipment for application to turfgrass. Apply a uniform, coarse droplet spray, using a low pressure setting to eliminate off target drift. Perform calibration on a regular basis to ensure that equipment is distributing product properly.

#### RESTRICTIONS FOR TURFGRASS USE:

- Do not exceed a total of 1.6 pints application (0.4 lb of active ingredient) per acre per year.
- Do not mow turf or lawn area, until after adequate irrigation or rainfall has occurred.
- Do not apply when infested turfgrass areas are waterlogged or soil beneath turf is saturated with water. These conditions prevent thorough and consistent distribution.
- Do not apply this product or allow it to drift to plants in bloom if bees are foraging the treatment area.

#### APPLICATION TO ORNAMENTALS

XYTECT 2F can be applied to ornamental plants in commercial and residential landscapes and interior plantscapes. XYTECT 2F is a systemic insecticide that is transported within the plant system from the roots to upper foliage. XYTECT 2F must be applied into a growing area of the plant that allows absorption of the active ingredient. Adding soluble nitrogen type fertilizers to the spray solution when appropriate can promote the uptake of the active ingredient.

Application can be made by foliar application or soil applications; including soil injection, drenches, and broadcast sprays. Foliar applications offer locally systemic activity against insect pests.

The systemic translocation of active ingredient will be slower when applied to woody plants with soil applications. This delay can take 60 days or longer depending on species and size of plant. To offset this, make applications before anticipated pest infestation.

**RESTRICTION:** For outdoor ornamentals, applications cannot exceed a total of 1.6 pints (0.4 lb of active ingredient) per acre per year.

#### ANT MANAGEMENT PROGRAMS

Use XYTECT 2F to control aphids, scale insects, mealybugs and other sucking pests on ornamentals with ant populations because it removes honeydew as a food source. To enhance control of ants, supplement with residual sprays, bait placements or other ant control tactics.

## APPLICATION EQUIPMENT FOR FOLIAR APPLICATIONS

XYTECT 2F mixes readily with water and may be used in many types of application equipment. Add a commercial spreader/sticker to promote coverage on hard to wet foliage such as holly, pine, or ivy.

XYTECT 2F is compatible with many commonly used fungicides, miticides, liquid fertilizers, and other insecticides. If applicator has no prior experience with a particular tank mix; check physical compatibility by making a small clear jar test using correct proportions of products to be tank mixed.

## RESTRICTIONS

- Keep children and pets off treated area until dry.
- For outdoor ornamentals, applications cannot exceed 1.6 pt (0.4 lb of active ingredient) per acre per year.
- Not for use in commercial greenhouses, nurseries, or on grasses grown for seed, or on commercial production of fruit and nut trees.
- Do not graze treated areas or use clippings from treated areas for feed or forage.
- Do not apply through any irrigation system
- Do not allow puddling of irrigation water following application.
- Do not apply XYTECT 2F to areas which are water logged or saturated, which will not allow penetration into the root zone of the plant.
- Treated areas may be replanted with any crop specified on an imidacloprid label, or with any crop for which a tolerance exists for the active ingredient.



FOLIAR APPLICATION TO ORNAMENTAL AND NON-BEARING FRUIT & NUT TREES, SHRUBS, EVERGREENS, FLOWERS, FOLIAGE PLANTS, GROUNDCOVERS AND INTERIOR PLANTSCAPES  
(Only for Industrial, Commercial Buildings, Residential and Landscaped Planting Areas)

## TO CONTROL:

Adelgids  
Aphids  
Honeylocust Plant Bug  
Diptera (Including Rhododendron gall midge,  
Honeylocust pod gall midge)  
Froghopper  
Galls (Including Hickory stem gall)  
Japanese beetles  
Lace bugs  
Leaf beetles  
(Including elm and viburnum leaf beetles)  
Leafhoppers  
(Including glassy-winged sharpshooter)  
Leafminers (Including Boxwood leafminer)

Mealybugs  
Planthoppers  
Psyllids  
Sawfly larvae  
Scales (Including Lecanium, Azalea bark,  
Calico, Cottony Camellia, Cottony maple,  
Cottony taxus)  
Spittlebugs  
Thrips (suppression) (Including Flower, Pear  
and  
Pine thrips)  
Treehoppers  
Weevils (Including white Pine and Black vine)  
Whiteflies

Apply 1.5 fluid ounces (45mL) per 100 gal of water. Make foliar applications before high pest populations become established. Reapply on an as needed basis, not to exceed 1.6 pts (0.4 lb ai) per acre per year..

To control White grub larvae, (such as Japanese beetle larvae, Chafer, Phyllophaga spp. Asiatic garden beetle, Oriental beetle) apply 0.46 to 0.6 fluid ounces (14 to 17 mL) per 1000 sq ft.

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Make broadcast applications by mixing specified rate in enough water to uniformly cover the treated area. Do not use less than 2 gallons of water per 1000 sq ft. In order to move the active ingredient through the thatch, irrigate if rainfall does not occur within 24 hours after application.

Refer to use directions specific for FLOWERS and GROUND COVERS concerning additional use directions.

RESTRICTION: For outdoor ornamentals, applications cannot exceed 1.6 pt (0.4 lb of active ingredient) per acre per year. Follow application restrictions for non-agricultural uses to protect bees and other pollinators.

SOIL APPLICATION TO ORNAMENTAL AND NON-BEARING FRUIT & NUT TREES, SHRUBS,  
FLOWERS AND GROUNDCOVERS

(Only For Industrial, Commercial Buildings, Residential, Landscaped Planting Areas)  
(Including State, National, and Private Wooded and Forested Areas)

TO CONTROL:

Adelgids	Leafminers
Aphids	Mealybugs
Armored scales (suppression)	Pine tip moth larvae
Black vine weevil larvae	Plant bugs
Eucalyptus longhorned borer	Psyllids
Flatheaded borers	Roundheaded borers
(including bronze, alder and emerald ash borers)	(including Asian longhorned beetles)
Japanese beetles	Royal Palm Bugs
Lace bugs	Sawfly larvae
Leaf beetles	Soft scales
(including elm and viburnum leaf beetles)	Thrips (suppression)
Leafhoppers	White grub larvae
(including glasswinged sharpshooter)	Whiteflies

For TREES -

Use the following rates as a function of tree diameter at breast height (DBH):

Apply 0.1 - 0.4 fl oz per inch of trunk diameter (DBH). You may use the higher rate (0.3 - 0.4 fl oz) only for trees greater than 15 DBH to control the following pests:

Asian longhorned beetle  
Emerald Ash Borer  
Eucalyptus longhorned borer  
Bronze birch borer  
Alder borer

Restriction: For outdoor ornamentals, broadcast applications cannot exceed 1.6 pt (0.4 lb of active ingredient) per acre per year.

Diameter at Breast Height (D.B.H.) = is measured at 4.5 feet from the ground.

#### APPLICATION TECHNIQUE:

##### SOIL INJECTION:

Mix required dosage in sufficient water to inject an equal amount of solution in each hole. For concentrate injectors mix required dose with up to 1 gallon of water per DBH inch. Maintain a low pressure and use sufficient solution for distribution of the liquid into treatment zone. Dilution rate may vary depending on equipment used, tree size and application rate. Refer to the instructions for injector equipment being used for guidance.

- GRID SYSTEM: Make applications in a grid pattern on 2.5 foot centers within the drip line of the tree.
- CIRCLE SYSTEM: Make applications in holes evenly spaced approximately 2 – 3 feet apart in a circle within the drip line of the tree. Larger trees may require additional application circles.
- BASAL SYSTEM: Make applications into holes evenly spaced around the base of the tree trunk no more than 6 to 12 Inches out from the base.

##### SOIL DRENCH:

Uniformly apply the dosage in no less than 10 gallons of water per 1000 square feet as a drench around the base of the tree, directed to the root zone. Any plastic or other barrier that may prevent drench solution from reaching the root zone must be removed.

##### FOR ALL APPLICATION TECHNIQUES:

- Inject an equal amount of water and solution in each hole.
- Use low pressure and sufficient solution for thorough distribution into the treatment zone.
- Maintain soil moisture for 7 to 10 days.
- Application to trees already heavily infested with borers listed may not prevent the eventual loss of the trees.

##### RESTRICTIONS FOR TREES:

- Do not use less than 4 holes per tree.
- No Soil Injection Applications Allowed In Nassau or Suffolk Counties of New York.
- For outdoor ornamentals, applications cannot exceed 1.6 pt (0.4 lb of active ingredient) per acre per year.

##### For SHRUBS –

Apply 0.1 to 0.2 fl oz (3 to 6 mL) per foot of shrub height.

##### APPLICATION TECHNIQUES:

##### SOIL INJECTION:

Apply to individual plants using dosage indicated.

##### SOIL DRENCH:

Uniformly apply the dosage in no less than 10 gallons of water per 1000 square feet as a drench around the base of the shrub, directed to the root zone. Remove plastic or any other barrier that will stop solution from reaching the root zone.

- Mix required dosage in sufficient water to inject an equal amount of solution in each hole.
- Maintain a low pressure and use sufficient solution for distribution of the liquid into the treatment zone.
- Maintain soil moisture for 7 to 10 days.

##### RESTRICTIONS FOR SHRUBS:

- Do not use less than 4 holes per shrub.
- No Soil Injection Applications Allowed In Nassau or Suffolk Counties of New York.
- Do not exceed 1.6 pt (0.4 lb of active ingredient) per acre per year.

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For FLOWERS and GROWDCOVERS –  
Apply 0.46 to 0.6 fluid ounces (14 to 17 mL) per 1000 sq ft.

Apply as a broadcast treatment and incorporate into the soil before planting or apply after plants are established. If application is made to established plants, irrigate after application.

RESTRICTIONS:

- Follow application restrictions for non-agricultural uses to protect bees and other pollinators.
- Do not exceed 1.6 pts (0.4 lbs ai) per acre per year.



POME FRUITS  
(For Residential Areas Only)

Includes: Apple, Crabapple, Loquat, Mayhaw, Pear, Pear (oriental), Quince

TO CONTROL:

Aphids (except Woolly apple aphid)  
Leafhoppers (including glassy-winged  
sharpshooter)

Leafminer  
Mealybugs  
San Jose Scale

Apply 1.5 fluid ounces (45 mL) per 100 gal

OR

6.0 fluid ounces per acre as foliar spray as specified after petal-fall is complete.

- For control of rosy apple aphid, apply prior to leafrolling caused by the pest.
- For first generation leafminer control, make first application as soon as petal fall is complete. Greatest leafminer control will result from the earliest possible application. For second and succeeding generations of leafminer, optimal control is obtained from applications made early in the adult flight against egg and early instar larvae. A second application may be required 10 days later if severe pressure continues or if generations are overlapping. A single application may result in suppression only. XYTECT 2F will not control late stage larvae.
- For San Jose Scale, time applications to the crawler stage. Treat each generation.
- For late season (preharvest) control of leafhopper species, apply XYTECT 2F while most leafhoppers are in the nymphal stage.
- For optimal control of mealybug, insure good spray coverage of the trunk and scaffolding limbs or other resting sites of the mealybug.

RESTRICTIONS FOR RESIDENTIAL POME FRUITS:

- Do not apply more than 6.0 fluid ounces per acre in a single application. Do not make more than 4 applications per acre per year.
- Allow 10 or more days between applications.
- Allow at least 7 days between last application and harvest.
- Not for use in California for control on pears.
- Follow application restrictions for non-agricultural uses to protect bees and other pollinators.



PECAN  
(For Residential Areas Only)

TO CONTROL:

Yellow pecan aphid  
Pecan spittlebug  
Black margined aphid

Pecan stem phylloxera  
Pecan leaf phylloxera

Apply 1.5 fl oz (45 ml) per 100 gal

OR

6.0 fl oz/A<sup>1</sup> as a foliar application as pest pressure begins to increase.

Make a second application 10 to 14 days after first if field scouting reveals continued pest pressure. Use of an organosilicone based spray adjuvant at specified rate can insure thorough coverage of foliage.

RESTRICTIONS FOR RESIDENTIAL PECAN TREES:

- Do not apply more than a total of 18.0 fluid ounces of XYTECT 2F per acre per year.
- Do not make more than 3 applications per year.
- Allow 10 or more days between applications.
- Do not use on pecans in California unless directed by state specific 24 (c) labeling
- Follow application restrictions for non-agricultural uses to protect bees and other pollinators.

<sup>1</sup> The amount of Xytext 2F required per acre may vary and depends on tree size or volume of foliage. The rates given are based on a standard of 400 gallons of dilute spray solutions per acre for large trees with full foliage. DO NOT apply more than 18 fluid ounces of Xytext 2F per acre per year.

GRAPES



(For Use Only For Industrial, Commercial Buildings and Residential Planting Areas)

TO CONTROL:

Leafhoppers (including glassy-winged sharpshooter)  
Mealybugs

Apply 1.5 fl oz (45 mL) per 100 gal

OR

3.0 fl oz/A (90 mL/A) as a foliar spray using 200 gallons of water per acre.

RESTRICTIONS FOR RESIDENTIAL GRAPES:

- Do not apply more than a total of 6.0 ounces of XYTECT 2F per acre per year.
- Allow at least 14 days between applications.
- Applications may be applied up to and including day of harvest.
- Follow application restrictions for non-agricultural uses to protect bees and other pollinators.

### CONDITIONS OF SALE AND WARRANTY

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